

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HEINZ OSTER Docket No.: 01-336

Serial No.: Examiner :

Filed : Art Unit :

For : DEVICE FOR SHAPE-FORMING

RECESSES IN FILM-TYPE MATERIAL

900 Chapel Street

Suite 1201

New Haven, CT 06510-2802

## INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of Patents and Trademarks United States Patent & Trademark Office Washington, D.C. 20231

## Dear Sir:

În accordance with the requirements of 37 C.F.R. 1.97 and 1.98, Applicant hereby submits the prior art documents listed hereinbelow, copies enclosed, which prior art was cited in the corresponding European Search Report.

(1) U.S. Patent No. 3,584,109 for DRAWING METHOD, By W.R. Meadors et al., Patented June 8, 1971. This reference discloses a method for drawing or cold forming plastic sheet material by applying a relatively high load, on the order of 1500-4000 p.s.i., to the peripheral area of the blank during the initial stages of the draw; and as the

drawing continues, reducing the loading to about 300-600 p.s.i.

- January 12, 1995. This reference discloses an apparatus and method of forming a container. The method includes heat softening a sheet of thermoplastic material, holding the sheet, moving a stretching tool relative to the sheet so as to cause the tool to press against the sheet and to stretch the sheet and moving a plurality of fingers provided on the stretching tool.
- (3) U.S. Patent No. 4,832,676 for METHOD AND APPARATUS FOR FORMING PAPERBOARD CONTAINERS, By Albert D. Johns et al., Patented May 23, 1989. This reference discloses a method and apparatus for forming a container from a sheet of blank material, whereby a segmented male die member first forms the bottom and then the sidewall and rim of the container prior to the formation of the lip portion of the container while the blank is being restrained in a radial direction by the engagement of the blank by two opposing draw pad members.

- (4) U.S. Patent No. 4,127,378 for APPARATUS FOR COLD-FORMING PLASTIC SHEET, By William R. Meadors, Patented November 28, 1978. This reference discloses an apparatus for coldforming a thermoplastic sheet to provide a circular container part such as a lid or dish comprising opposing concentric die members for engaging a sheet of thermoplastic material, the sheet being drawn around the circular edge of one of the die members to provide a concentric central portion and a concentric annular depending skirt having a proximal edge adjacent the central portion, an intermediate portion, and a distal free edge, providing an annular void in the die members adjacent the skirt.
- (5) Japanese Patent Document 06 055623, published March 1, 1994. Although the reference is in the Japanese language, the drawings are believed to be clear.
- (6) European Patent Document 0 779 143, published June 18, 1997. Although the reference is in the German language, the drawings are believed to be clear.
- (7) U.S. Patent No. 1,668,349 for PAPER ARTICLE AND METHOD OF MANUFACTURE, By E.G. Baum, Patented May 1, 1928. This

reference relates to articles of cellulosic material and a method of manufacture, more especially of such articles formed up from paper sheets, as, for example, certain forms of bottle caps or closures.

- (8) U.S. Patent No. 2,484,656 for APPARATUS FOR MOLDING PLASTIC SHEET MATERIAL, By B.N. Sikka et al., Patented October 11, 1949. This reference relates to improvement in the manufacture of containers, hollow-ware or the like articles from resin impregnated laminations.
- (9) German Patent Document 706 023, published May 16, 1941.

  Although the reference is in the German language, the drawings are believed to be clear.
- (10) German Patent Document 39 30 603, published March 22, 1990.

  Although the reference is in the German language, the drawings are believed to be clear.
- (11) International Patent Publication WO 99/08857, published

  February 25, 1999. This reference discloses a laminated

  film in which a metal foil is sandwiched between two

  polymeric films which is cold formed to define one or more

blisters, and the base of the blister stamped with indicia, in two discrete stages.

- Overtically bending said cutoff four sides by a female die on whose inner wall there are provided in the stepped state an upper bending section and a male die whose outer wall is shaped complementary to the inner wall of said female die; curvedly shaping the abutting edges to provide the same time; and welding said abutting edges to provide the same time; and welding said abutting edges to provide the sow-shaped door.
- (13) European Patent Document 0 905 042, published March 31, 1999. There are no U.S. equivalents known.

(14) European Patent Document 0 987 094, published March 22, 2000. Although the reference is in the German language, the drawings are believed to be clear.

(15) FLIMM ET AL: "Spanlose Formgebung" DE, Munchen, Carl Hanser Verlap, Pages 234-249 - XP002107154, 1984.

The undersigned submits the above-identified references for independent consideration by the Examiner and does not make any admission that these references are or are not material to the present invention or that these references are or are not prior art with respect to the present invention.

If any charges are required in connection with this submission, it is requested that they be charged to Deposit Account No. 02-0184.

deposited with the United States Postal Service as Express Mail in an envelope addressed to:Commissioner i Patents and Trademarks, Washington, D.C. 20231

Express Mail Label No. EL398544339US Respectfully submitted,

HEINZ OSTER

May 22, 2001

Robert H. Bachman

Attorney for Applicant

Area Code: 203

777-6628 Telephone:

Telefax 865-0297

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